

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P651529

Luminaire Tested: **GALN-SA7D-840-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651529  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA7D-840-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46181.8 lumens  
Efficiency: N/A  
Efficacy: 106.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

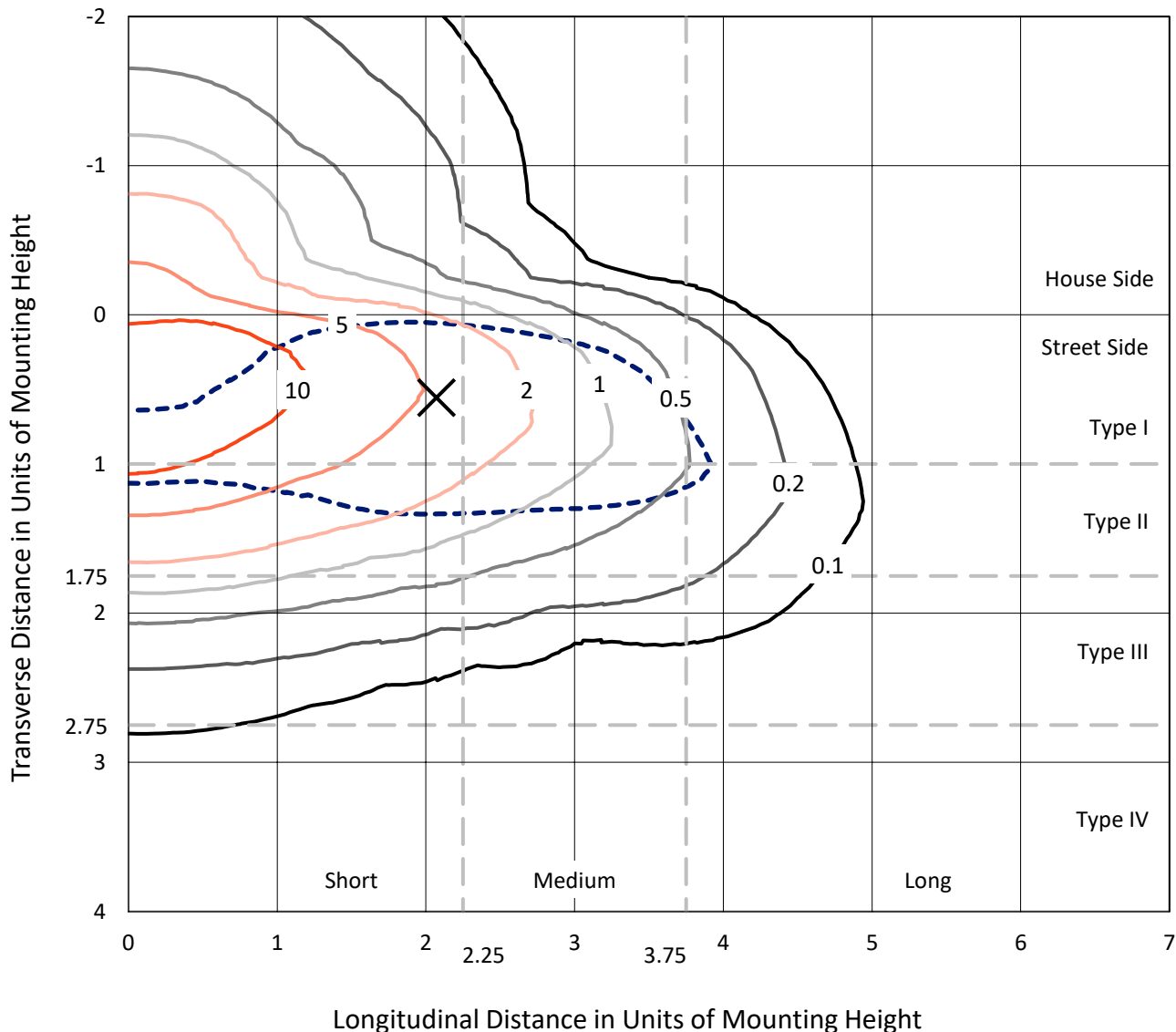
Input Watts (W): 433  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

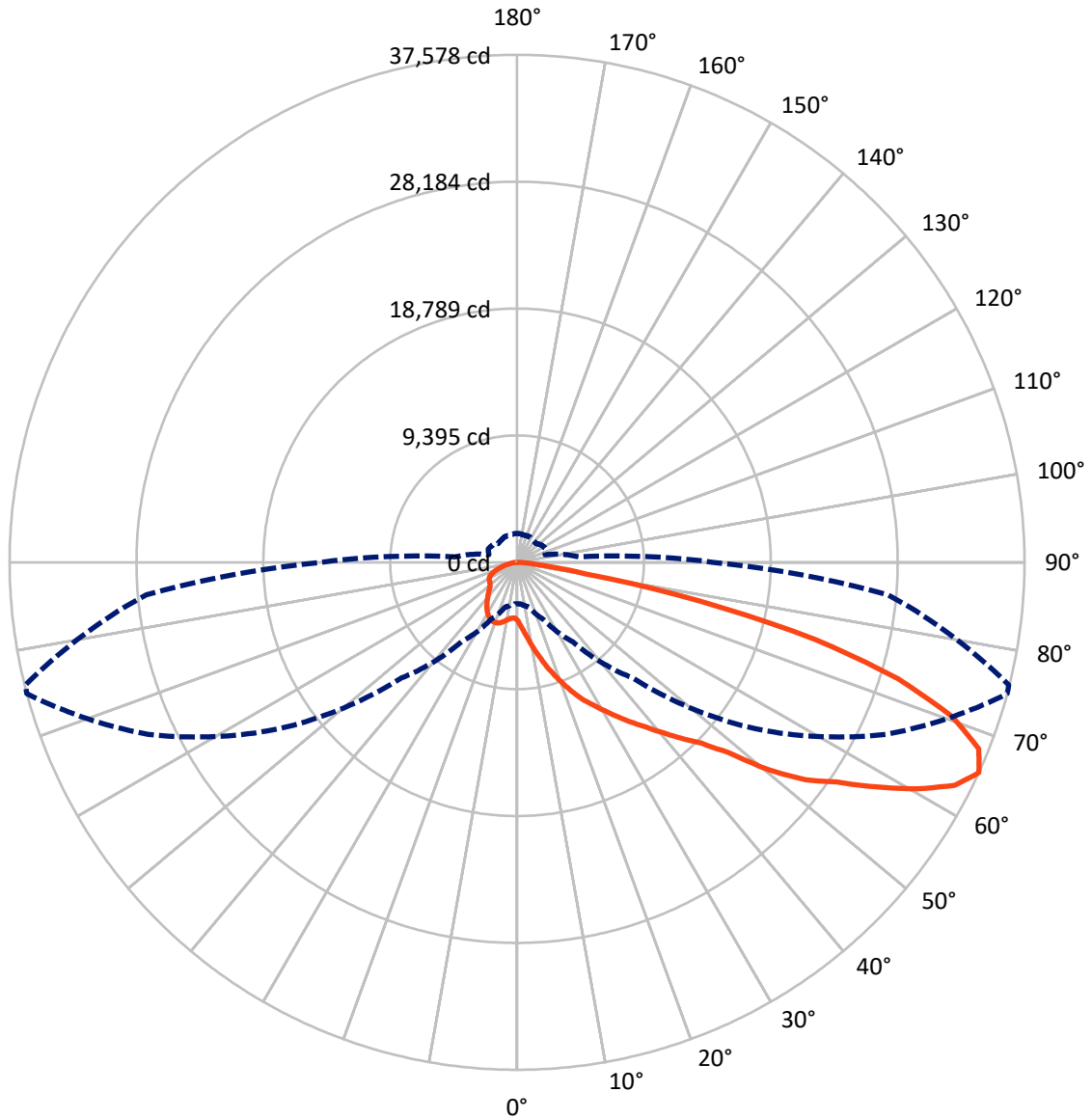
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.8 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7763.8	0.0	7763.8
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	38418.1	0.0	38418.1
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	46181.8	0.0	46181.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	521.3	1.1
10°-20°	2042.0	4.4
20°-30°	3944.4	8.5
30°-40°	6406.9	13.9
40°-50°	8813.3	19.1
50°-60°	10405.5	22.5
60°-70°	9116.9	19.7
70°-80°	4352.5	9.4
80°-90°	579.2	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	46181.8	100.0
0°-180°	46181.8	100.0

**Coefficient of Utilization**

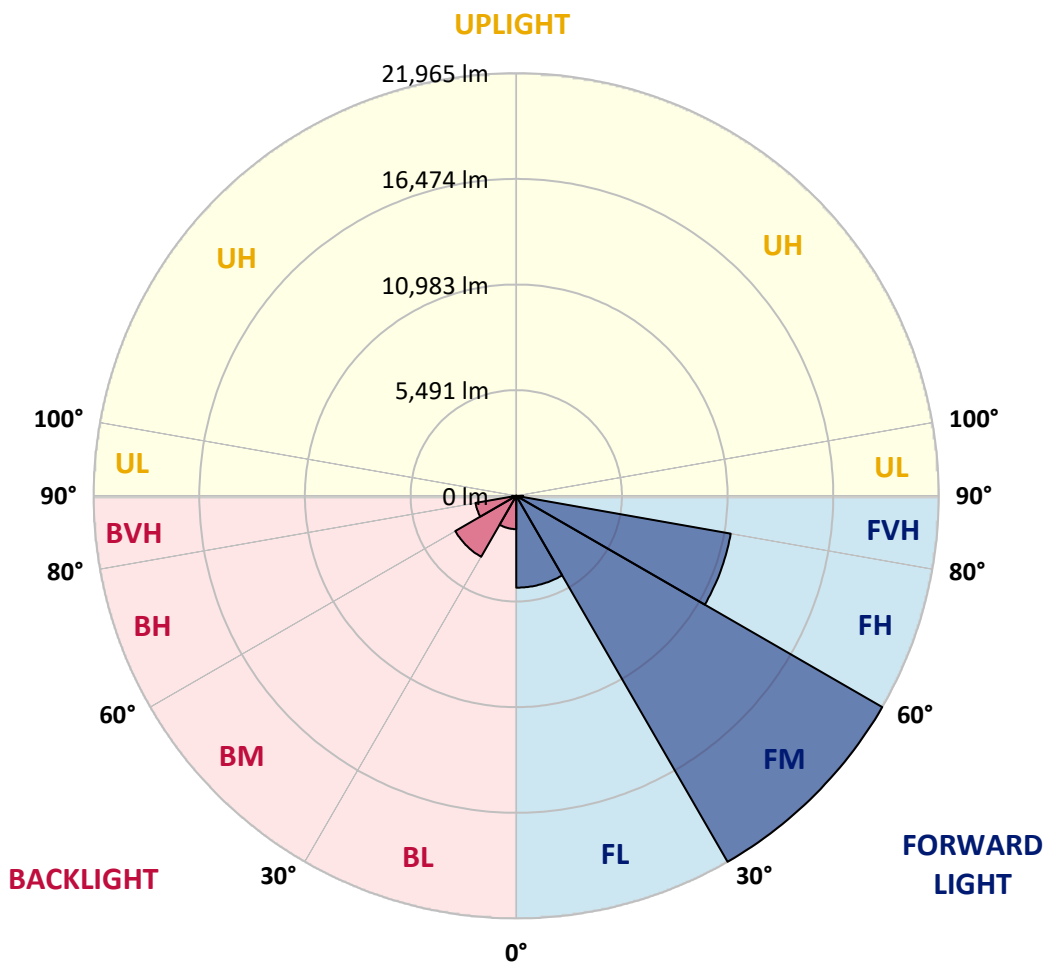


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4774.5	10.3			
FM (30°-60°)	21965.1	47.6			
FH (60°-80°)	11316.6	24.5			G4/12000
FVH (80°-90°)	361.9	0.8			G3/500
BL (0°-30°)	1733.2	3.8	B3/2500		
BM (30°-60°)	3660.6	7.9	B3/5000		
BH (60°-80°)	2152.7	4.7	B3/2500		G3/2500
BVH (80°-90°)	217.2	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9
2.5°	5701.1	5663.5	5623.5	5513.3	5395.5	5262.8	5072.4	4889.6	4646.6	4639.0	4458.7
5°	7281.7	7256.7	7078.8	6976.1	6703.1	6339.9	6031.7	5553.4	5110.0	5057.4	4706.7
7.5°	8734.5	8636.8	8569.2	8383.8	8113.3	7647.5	7051.3	6405.0	5663.5	5593.4	5012.3
10°	9829.2	9819.2	9784.1	9623.8	9420.9	8957.5	8296.2	7369.3	6364.9	6227.2	5383.0
12.5°	10648.3	10655.8	10650.8	10648.3	10503.0	10109.7	9393.3	8416.4	7073.8	6976.1	5811.3
15°	11186.8	11262.0	11292.0	11417.2	11429.8	11166.8	10550.6	9428.4	7872.9	7727.6	6272.3
17.5°	11542.6	11580.1	11720.3	11933.3	12106.1	12058.5	11509.9	10365.2	8689.5	8446.5	6750.7
20°	11883.2	11948.3	12056.1	12346.6	12652.2	12792.5	12406.7	11324.6	9498.5	9343.3	7279.2
22.5°	12592.0	12684.7	12722.3	12870.2	13130.6	13378.6	13203.3	12243.9	10385.3	10174.8	7840.3
25°	13791.9	13889.6	13784.4	13749.3	13834.5	13957.2	13919.6	13110.6	11221.9	10921.3	8371.3
27.5°	15355.0	15367.5	15162.1	14966.7	14756.3	14693.7	14578.5	13879.6	11948.3	11697.8	8904.8
30°	17033.3	16973.1	16632.5	16279.2	15923.6	15572.9	15242.3	14621.0	12757.4	12469.3	9428.4
32.5°	18591.3	18558.8	18180.5	17631.9	17030.8	16700.1	16031.3	15370.0	13624.1	13346.1	9966.9
35°	19758.5	19806.1	19390.3	18791.6	18135.4	17842.3	16998.2	16156.5	14520.9	14217.8	10553.1
37.5°	20587.7	20562.6	20194.4	19675.9	19099.8	18844.3	18127.9	17015.7	15485.2	15194.7	11194.4
40°	20883.3	20868.2	20595.2	20217.0	19851.2	19761.1	19310.2	17942.5	16589.9	16249.2	11965.8
42.5°	20695.4	20728.0	20547.6	20444.9	20377.3	20442.4	20485.0	19157.4	17794.7	17481.6	12802.5
45°	20119.2	20101.8	20076.7	20244.6	20625.3	21053.6	21647.3	20304.6	19104.8	18854.3	13924.7
47.5°	19089.8	19215.0	19277.7	19741.0	20572.6	21587.1	22984.9	21842.6	21006.0	20788.1	15635.5
50°	17649.5	17749.6	18120.4	18944.5	20184.4	21787.5	24292.5	24357.5	24177.2	23768.9	17494.1
52.5°	15400.1	15555.4	16319.4	17829.8	19387.8	21704.9	25084.0	26514.3	26752.2	26446.6	19325.3
55°	12882.6	13100.6	13907.1	15888.5	18290.7	21254.0	25630.1	27764.2	28713.5	28430.5	21088.7
57.5°	10417.8	10648.3	11477.4	13396.1	16377.0	20257.0	25988.2	29156.9	31383.8	31015.6	23282.9
60°	7807.8	8048.2	8759.6	10736.0	13651.6	18308.2	25745.3	30364.3	34051.5	33893.6	25479.8
62.5°	5037.3	5302.8	5921.6	7557.2	10493.0	15645.5	24445.2	31030.5	36361.0	36170.6	27082.9
65°	3068.5	3098.6	3439.2	4691.7	7181.6	12113.7	21471.9	30146.3	37578.3	37520.7	27571.3
67.5°	1983.8	2031.4	2186.8	2810.5	4305.9	8414.0	17168.5	27228.1	36867.0	36846.9	26561.8
70°	1675.8	1690.8	1761.0	1896.2	2502.4	5102.4	12056.1	22576.6	34164.2	34164.2	24134.6
72.5°	1497.9	1518.0	1543.0	1585.6	1785.9	2890.6	7194.1	17574.3	29497.6	29692.9	20542.6
75°	1360.1	1355.1	1370.2	1377.7	1523.0	1888.7	3719.7	12997.9	22819.5	22428.8	14876.5
77.5°	1164.8	1172.3	1164.8	1197.3	1345.1	1437.8	1888.7	8722.0	13829.5	13323.5	7467.1
80°	956.9	969.4	982.0	1002.0	1149.7	1092.1	1134.7	3975.2	5115.0	5007.3	2307.0
82.5°	718.9	736.5	756.5	804.1	904.2	721.4	716.4	1698.3	1846.1	1690.8	849.2
85°	290.6	343.1	518.5	566.1	568.6	395.8	440.9	708.9	754.0	736.5	333.1
87.5°	67.6	80.1	167.9	253.0	233.0	147.8	162.8	230.4	263.0	243.0	112.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9	4290.9
2.5°	4376.1	4288.3	4138.1	4022.8	3940.2	3867.6	3822.4	3794.9	3784.9	3782.4	3784.9
5°	4523.8	4368.5	4130.6	3980.3	3897.6	3850.0	3822.4	3820.0	3822.4	3825.0	3817.5
7.5°	4726.8	4503.8	4193.2	4052.9	3990.3	3955.2	3942.7	3937.6	3940.2	3937.6	3937.6
10°	4997.2	4691.7	4315.9	4170.6	4118.0	4077.9	4057.9	4045.4	4035.4	4025.4	4020.3
12.5°	5295.4	4899.6	4448.7	4308.4	4233.3	4170.6	4125.5	4093.0	4070.4	4047.9	4042.9
15°	5628.5	5120.0	4596.5	4401.1	4293.4	4200.7	4123.1	4070.4	4030.4	3997.8	3995.3
17.5°	5946.6	5327.9	4696.6	4443.7	4285.9	4155.6	4052.9	3980.3	3930.2	3887.6	3882.6
20°	6287.2	5525.8	4741.7	4416.1	4210.7	4052.9	3917.6	3830.0	3772.4	3724.8	3717.2
22.5°	6630.4	5693.7	4736.8	4328.5	4080.4	3895.1	3752.3	3659.6	3592.0	3544.4	3526.9
25°	6958.6	5828.9	4674.1	4188.2	3900.1	3707.2	3562.0	3476.8	3416.6	3359.0	3359.0
27.5°	7254.1	5909.0	4556.4	4017.9	3714.8	3511.8	3396.6	3319.0	3263.8	3226.3	3203.8
30°	7544.7	5946.6	4396.1	3802.4	3519.3	3346.5	3253.8	3208.8	3158.6	3116.1	3111.1
32.5°	7805.2	5939.1	4195.7	3592.0	3334.0	3211.3	3173.7	3138.6	3086.0	3025.9	3010.9
35°	8058.2	5889.0	3957.7	3361.6	3178.7	3131.1	3141.1	3091.0	2995.8	2920.7	2908.2
37.5°	8333.8	5798.8	3697.2	3173.7	3048.5	3093.5	3118.6	3008.3	2853.1	2735.4	2707.8
40°	8651.9	5696.1	3426.7	2985.8	2945.8	3058.5	3058.5	2855.6	2642.7	2570.0	2550.0
42.5°	9025.1	5611.0	3201.3	2828.0	2860.6	2973.3	2960.7	2652.7	2565.0	2527.5	2517.4
45°	9616.2	5580.9	2968.3	2690.3	2790.4	2873.1	2770.4	2582.5	2532.4	2502.4	2492.4
47.5°	10550.6	5615.9	2762.9	2587.6	2710.3	2772.9	2557.5	2534.9	2499.9	2457.3	2452.3
50°	11417.2	5583.4	2617.6	2530.0	2640.2	2652.7	2469.8	2477.3	2457.3	2409.7	2399.7
52.5°	12126.2	5480.7	2524.9	2499.9	2580.0	2442.3	2387.2	2414.7	2407.2	2347.1	2337.1
55°	12905.2	5418.1	2479.9	2499.9	2540.0	2259.4	2309.5	2349.6	2339.6	2297.0	2294.5
57.5°	13849.5	5430.6	2447.3	2507.4	2499.9	2166.8	2231.8	2279.4	2276.9	2264.4	2264.4
60°	14816.4	5435.6	2397.2	2504.9	2452.3	2094.1	2151.7	2219.3	2224.4	2231.8	2231.8
62.5°	15137.1	5217.6	2299.5	2459.8	2347.1	2024.0	2076.5	2169.3	2164.2	2184.2	2186.8
65°	14538.4	4614.0	2154.2	2357.1	2211.8	1973.8	2018.9	2104.1	2076.5	2129.2	2139.2
67.5°	13233.3	3817.5	1928.7	2171.7	2061.5	1921.3	1981.4	2013.9	1963.8	2066.5	2069.0
70°	11437.3	2980.8	1643.2	1908.7	1891.2	1866.2	1951.3	1901.2	1831.1	1956.3	1931.3
72.5°	9563.7	2276.9	1312.5	1560.6	1663.2	1783.5	1898.7	1755.9	1658.2	1695.8	1650.7
75°	7184.0	1683.3	1054.5	1222.4	1385.2	1665.8	1851.1	1580.6	1430.3	1395.2	1385.2
77.5°	3662.1	1099.6	789.0	914.3	1039.6	1505.5	1785.9	1375.2	1184.8	1129.7	1104.7
80°	1307.6	683.8	556.1	631.3	701.4	1295.1	1560.6	1137.2	919.3	909.3	919.3
82.5°	606.2	440.9	373.2	413.3	415.8	864.2	1189.8	849.2	698.9	1062.1	896.8
85°	260.5	220.4	210.4	205.4	190.4	385.8	668.8	455.9	711.4	318.2	293.1
87.5°	77.6	87.6	77.6	57.6	42.6	42.6	67.6	25.1	17.5	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)